N.B.
Ind.
Rep

Annual Report

LEGISLATIVE LIBRARY
WITHDRAWN
DISCARDED

1965

New Brunswick Industrial Safety Council

101-05186/

NEW BRUNSWICK
INDUSTRIAL SAFETY COUNCIL

FREDERICTON, NEW BRUNSWICK

The Honourable K. J. Webber
Minister of Labour
Province of New Brunswick

Dear Sir:

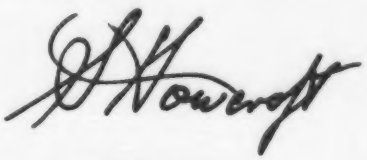
The Third Annual Report of the New Brunswick Industrial Safety Council is intended to present in a condensed but comprehensive manner the important aspects of the Council's operations for the calendar year 1965; also included is an analysis of Industrial Accident trends within the Province.

Although the results obtained to date in reducing Industrial Accident frequency leaves much to be desired, it is encouraging to note that the severity rate is diminishing, that an increasing number of Employers are turning to the Council for assistance and that in nearly every case where a Safety Programme has been initiated the results have been very satisfactory.

The year saw the Council increased from the original six members to fifteen, this move was recommended and carried out in order to give greater depth to the Council through a wider representation of "Classes".

I wish to thank all members of the Council for their support and constructive criticism and on the Council's behalf the Department of Labour, the New Brunswick Workmen's Compensation Board, the Department of Finance and the Department of Health for their valuable co-operation.

Respectfully submitted,



H. S. HOWCROFT
Chairman

NEW BRUNSWICK INDUSTRIAL SAFETY COUNCIL

ANNUAL REPORT 1965

G. W. Crandlemire, Executive Director

The New Brunswick Industrial Safety Council was reorganized early in 1965 to provide for a wider representation of its membership. The number of the Council was increased to fifteen to allow for representation from all classes of industry, both from management and labour, and for an equal number of government representatives.

Mr. H. S. Howcroft, Manager, Hamilton Cotton Co. Ltd., Marysville Mills, was re-appointed chairman and the terms of the various members were staggered to provide for continuity of membership when the terms of the members expired.

The present membership is as follows:

Representing Labour	**Address**	**Industrial Class**
T. M. McCarthy	Red Bank	*Mining*
Aurele Ferlatte	Dalhousie	*Forest Products*
Edwin Booth	Lewisville	*Manufacturing*
Leo McCluskey	Saint John	*Construction*
D. W. MacKenzie	Moncton	*Transportation*
Representing Management		
Douglas Flower	Minto	*Mining*
J. R. Miller	Bathurst	*Forest Products*
H. S. Howcroft (*Chairman*)	Fredericton	*Manufacturing*
Paul Levesque	Fredericton	*Construction*
F. E. Daniels	Saint John	*Transportation*
Representing Government		
R. G. Jones	Saint John	*Workmen's Compensation Board*
G. G. Duclos	Fredericton	*Department of Labour*
Dr. C. W. Kelly	Fredericton	*Department of Health*
R. W. Warren	Fredericton	*Department of Lands and Mines*
G. W. Crandlemire	Fredericton	*N.B. Industrial Safety Council*

We believe this gives a better representation to all industries and should allow us to develop a program that gives a rightful emphasis to all classes of industrial activity.

PERSONNEL

J. E. Sinclair — *Promotional Supervisor*
E. P. McCoy — *Statistician*

Field Representatives

K. E. Hall — Fredericton
R. E. Beaton — Moncton
G. H. Bovaird — Saint John
V. L. Buckley — Fredericton
G. D. Cruchy — Saint John
F. D'Amour — Dalhousie

Miss J. Swan — *Secretary*
Miss F. M. McNamara — *Stenographer*

SAFETY CODE

Perhaps one of the most significant developments during the year was the passing by the Provincial Legislature of the New Brunswick Industrial Safety Code.

This code, prepared and administered by the Technical Services Branch of the Department of Labour, will be a valuable aid in informing all employers of the safety requirements in their operations and is a useful tool in educating employees and supervisors of the safe way to work.

More than this, it has the force of law and the regulations and requirements laid down by it can be and will be enforced.

It is to be hoped that very few employers will be so negligent in their sense of responsibility that force will have to be used to ensure that no workman is permitted to work in unnecessarily hazardous conditions or in an unsafe manner.

Copies of the code are available at a cost of $2.00 each from Mr. J. L. Sisk, Director, Technical Services Branch, Department of Labour, Fredericton, N.B.

A specific code applicable to the logging industry was prepared in co-operation with the New Brunswick Forest Industries Safety Association and is included with the general code.

STAFF

We were shocked and saddened by the sudden death from a heart attack of our Saint John field representative, Herbert Jessome in June. He had been a valued member of our staff and we have felt his loss severely.

During the year we took on two new field representatives. In March we hired Vincent Buckley of Fredericton. He has spent much of the time in training and has accepted the responsibility of working with several of the largest firms.

In September, G. H. Bovaird of Saint John took over the Saint John territory. He had had considerable experience in the safety field having been safety supervisor for Domtar Construction in Saint John for several years.

Mr. Buckley and Mr. Bovaird both took the Lateiner Master Safety Training course to equip themselves for their work.

During the year, members of our staff attended the conference called by the Nova Scotia Department of Labour, the Prince Edward Island safety conference, the Quebec and Ontario Industrial Accident Prevention Associations conferences, the Canadian Industrial Safety Association annual convention, and the National Safety Congress.

We continued our policy of having our staff brought to the medallion level of first aid training.

MASS MEDIA

One of the vital problems in safety education is how to reach a working force of close to 200,000 people widely dispersed in large and small units throughout the Province.

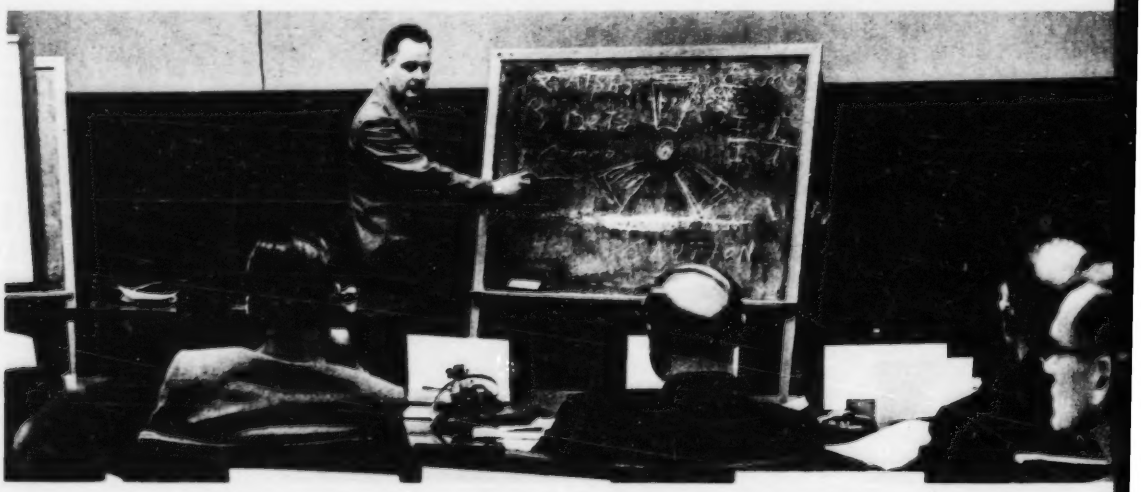
Our field representatives visit many firms but we can only hope to make personal contact with a small portion of them. In addition, the families of the workmen have a great effect on their actions and young people should be trained to adopt safe practices until they acquire habits which will become part of their working procedures.

For these reasons we have tried out a number of 60-second TV commercials and radio commercials during the year. It is difficult to determine if they had any practical effect but we did get a number of indications that the coverage was widespread.

We called a meeting of safety supervisors of several of the larger firms in the Province to discuss the matter. They strongly recommended a mass media campaign and also that we try to initiate safety training programs into the technical, vocational and high schools of the Province.

Plans have been made to do this. We have purchased some more TV and radio commercials and we have made arrangements to produce more for 1966. We have also set in motion plans to utilize all communications media: newspapers, billboards, posters, radio and television in an effort to increase the coverage and, we hope, the effectiveness of our safety promotion and education efforts.

We have also initiated programs in the technical schools and in some vocational schools. These will be broadened during the year and participation in apprenticeship training programs will also be continued.



This program will not be a haphazard or general one. Our statistics indicate that injuries to the hands, head and feet are the most frequent. Consequently much of our promotional and educational material will be aimed at preventing these types of injuries.

We hope that eventually the school programs will provide adequate safety training as part of their regular curriculum. Until this happens we must try to fill the gap.

SERVICES

During the year we added eleven new films, including one on housekeeping, one on lifting, and a new series for foremen entitled "The Personal Side of Safety".

There were 340 showings of our films during the year to an audience of over 11,500; a considerable increase over the previous year.

Our own staff statistics can be stated briefly. Over 3,000 visits were made to employers. Fifty management courses were conducted for more than 1,000 supervisors and foremen. Over 200 employee meetings were held with a total attendance of 4,600.

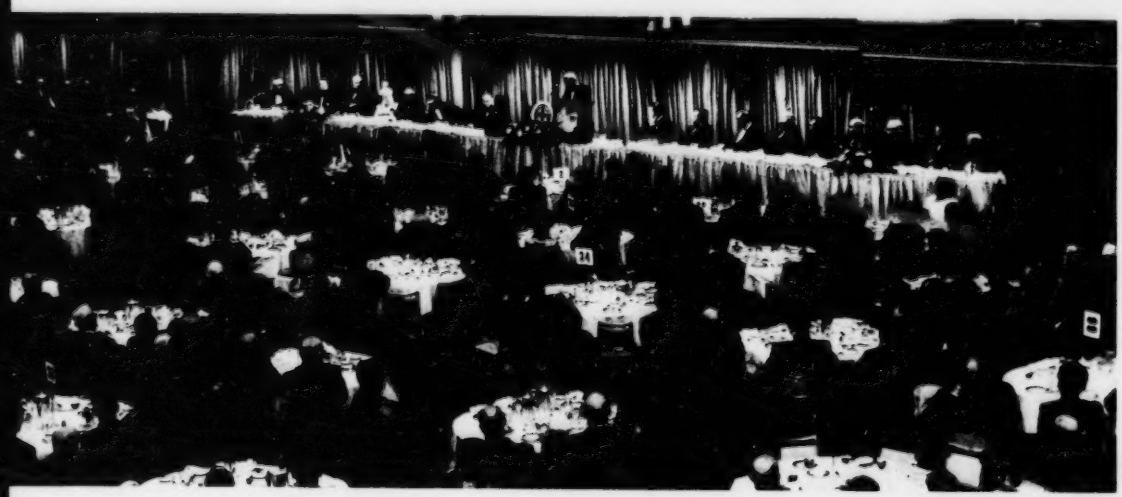
The Turtle Club, Gold Cap and Wise Owl awards are still being sponsored and this has in many instances demonstrated to employees the extreme value of wearing head and eye protection. Several of the recipients of these awards have put forth considerable effort to convince fellow employees of the necessity of wearing protective clothing.

CONVENTION

Our annual convention for Management, Labour and Government participation was held this year in April at the Brunswick Hotel in Moncton.

We co-operated with the Canadian Industrial Safety Association and held sessions for two days. Our own program was held on Thursday and the Canadian Industrial Safety Association program for Maritime delegates took place on Friday. Both days' sessions were well attended. The New Brunswick Forest Industries Safety Association Inc. held their annual meeting and convention at the same time and all three groups held joint sessions during the two days.

Our keynote speaker, Mr. Joseph Connell of Kitchener was outstanding, and we are very pleased at the number of comments about the value of information received at the convention.



This year three safety trophies were presented by the Province of New Brunswick to firms which had the best safety record for the calendar year. Firms were divided into three groups according to the number of man-hours worked:

Group 1 over 800,001 man-hours per year

Group 2 200,001 to 800,000 man-hours per year

Group 3 60,000 to 200,000 man-hours per year

The winner of the trophy was determined by examining the injury and man-hours record as reported to the Workmen's Compensation Board. Each firm was examined according to a formula which gave points for the frequency rate, the severity rate, how the firm compared with others in its own group, how it compared with its own record the year previous, and the length of time the firms had gone without an injury.

The trophies were presented by the Honourable K. J. Webber, Minister of Labour, on behalf of the Province to The New Brunswick Telephone Company in Group 1; Lewis Connors & Sons, Saint John, in Group 2; and Kings County Memorial Hospital, Sussex, in Group 3.

These trophies will be awarded annually on the same basis.

Our 1966 convention is planned for May 5 and 6 at Bathurst. In conjunction with this, the Department of Labour will hold a course on Boiler and Pressure Vessels and steam heating equipment on May 2, 3, and 4. This should provide a most useful week for those who can attend.

Group 2

Group 1

Group 3

GENERAL COMMENTS

The industrial activity increased considerably during the year but the number of injuries remained relatively constant.

Some classes of industry improved their record but construction in particular suffered a marked deterioration of their number of injuries as well as the seriousness of them.

This is an industry that the likelihood of an injury being very serious or fatal is so great that no unnecessary situation should be allowed to exist where injuries can occur, because once the accident happens no one has any control over how serious the injury will be. A fatality occurred in which a man fell 75 feet, and one from a fall of only four feet.

It is my contention that much more severe penalties for both employers and employees must be provided and strictly enforced if we are to impress upon people that needless waste of human lives cannot be tolerated.

We have always been of the opinion that a national safety program that would provide for regional differences was a goal towards which we should strive, and we have fostered, encouraged and supported every suggestion or effort towards intra-provincial co-operation. We are very pleased that there seems to be some measure of acceptance to this idea in certain areas of the country.

A meeting was held in Winnipeg in October with national co-ordination as the main point of discussion. Although no definite progress was made, there are indications that the Canadian Industrial Safety Association will foster further moves in this direction.

It is our hope that the Federal Government may make some effort towards a national program some time in the future.

In the meantime, we have worked out an agreement with the Ontario Construction Safety Association to produce some radio and TV commercials together and to purchase at nominal cost what they have produced.

Our own work has continued and expanded. Several firms that seemed very reluctant to do anything about safety have initiated comprehensive safety programs and we are heartened by the effort they are putting into it.

There is ample evidence that both management and organized labour are ready to accept a greater measure of responsibility to provide safe working conditions and safe working habits.

Workmen themselves are becoming aware that they must be active participants in safety programs.

We have been regular participants at local labour meetings and at labour schools, and workmen are beginning to demand that safety programs be put into operation wherever they work.

NEW BRUNSWICK FOREST INDUSTRIES SAFETY ASSOCIATION INC.

The Association continued to operate in close co-operation with the Council during the year.

They report that most of the large companies have continued their efforts toward safer operations and the newer companies have appointed safety directors in an effort to avoid a poor injury record from the start.

With an increase in mechanical logging operations a study was initiated in co-operation with four of the larger firms to determine what new hazards were involved in the tree-length skidding operations and other mechanical developments.

Of course much of their effort was concentrated on smaller operators who had bad records and Mr. Pond, Manager, reports that several of these have undertaken safety programs on their operations. Most of these firms started by making safety clothing a condition of employment and carried on by holding safety meetings.

Some 72 of the firms report their injury statistics to Mr. Pond, who sends them all back out to those reporting for comparison purposes.

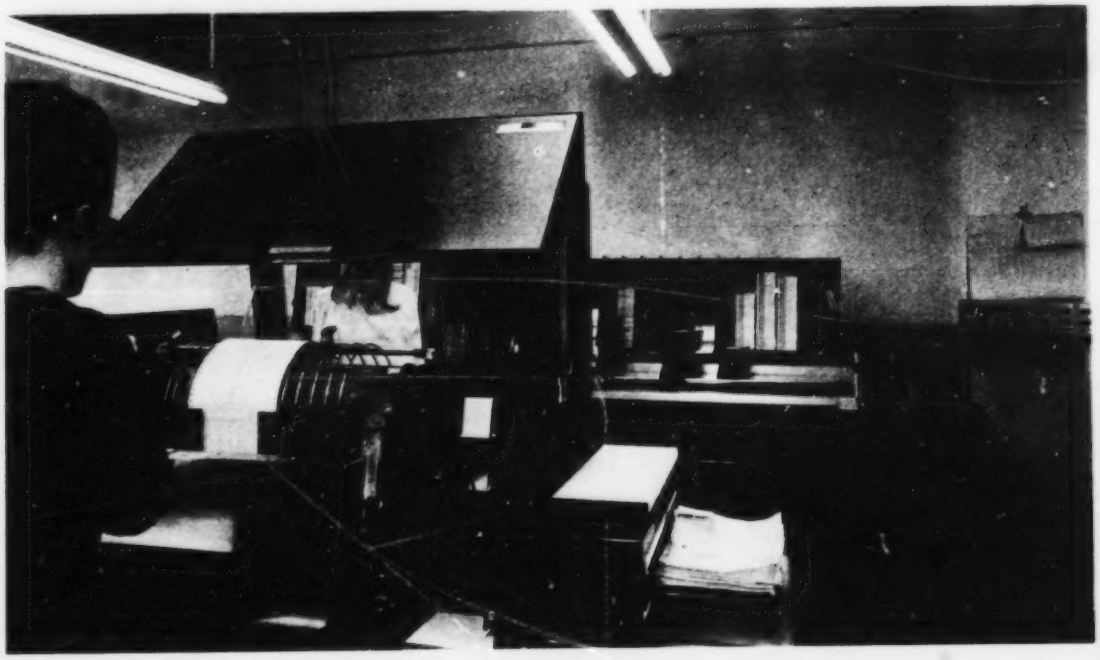
They have produced a 16 mm. coloured motion picture film of woods operating techniques and the hazards involved in logging. All the scenes were shot in provincial operations and a sound track is now being put on the film so that a sound movie film should soon be available.

During the year they made 625 visits to operators at 75 different woods operations and 60 sawmills. Forty employer and employee meetings were held with a total attendance of 1,724.

STATISTICS

A statistical report on the injuries for the year is included. We have not succeeded in producing a reliable report that can be sent to all employers.

The problem of getting man-hours worked and up-to-date injury records for all firms is a very difficult one to solve.



Much valuable information is being received and our statistician's report is very interesting and useful. This report follows our financial statement.

ACKNOWLEDGEMENTS

As in past years, our work has been made possible only with dedicated support from the Workmen's Compensation Board, the Department of Labour, Data Processing Branch, Audio Visual Bureau and other government departments. For these services we are indeed grateful.

EXHIBIT "A"

NEW BRUNSWICK INDUSTRIAL SAFETY COUNCIL

BALANCE SHEET

AS OF 31st DECEMBER 1965

ASSETS

Cash in bank		$14,064.68
Travelling advances receivable		600.00
		$14,664.68

LIABILITIES AND EQUITY

Accounts payable		$ 1,548.06
Due to Province of New Brunswick pension fund		7,388.99
Equity:		
Balance, 1st January 1965	$26,928.67	
Excess of revenue over expenditure for the year— Exhibit "B"	21,201.04	5,727.63
		$14,664.68

Approved on behalf of the Council

H. S. HOWCROFT

G. G. DUCLOS

Note: Office and other equipment acquired by the Council at a cost of $9,895.08 is not included in the assets above.

AUDITORS' REPORT

We have examined the balance sheet of the New Brunswick Industrial Safety Council as of 31st December, 1965, and the statement of revenue and expenditure for the year ended on that date.

We have received all the information and explanations we have required and we report that, in our opinion, the above balance sheet and related statement of revenue and expenditure fairly present, respectively, the financial position of the Council as of 31st December, 1965, and the financial results of its operations for the year then ended, according to the best of our information, the explanations given to us and as shown by the accounting records of the Council.

REEVEY, BLACKMORE, BURNHAM, LAWS & PAGE
Chartered Accountants

Fredericton, N.B.
1st February, 1966.

EXHIBIT "B"

NEW BRUNSWICK INDUSTRIAL SAFETY COUNCIL

STATEMENT OF REVENUE AND EXPENDITURES

FOR THE YEAR ENDED 31st DECEMBER 1965

Revenue:		
Grants—Workmen's Compensation Board of the Province of New Brunswick	$133,371.33	
Interest income	98.24	$133,469.57
Expenditure:		
Salaries	59,678.16	
Death benefit	5,986.17	
Employee benefits	4,835.04	
Travelling	8,508.28	
Office supplies	1,493.24	
Training and education supplies	8,923.25	
Directors—Remuneration	3,097.50	
—Expenses	2,138.41	
Car expenses—Rental	8,261.78	
—Gas and oil	3,222.63	
Rent	3,075.00	
Telephone	931.38	
Postage	993.86	
Professional fees	165.19	
Miscellaneous	1,122.62	
Convention expenses, net	314.69	
Data processing	3,194.04	
Total ordinary	115,941.24	
Equipment—Training and education	2,305.41	
Grant—New Brunswick Forest Industries Safety Association	36,423.96	154,670.61
Excess of revenue over expenditure for the year—To Exhibit "A"		$ 21,201.04

NEW BRUNSWICK
INDUSTRIAL SAFETY COUNCIL

STATISTICAL REPORT—1965

STATISTICAL REPORT—1965

INTRODUCTION

The following statistical report is based on information supplied to the New Brunswick Industrial Safety Council by the Workmen's Compensation Board of the Province.

The report attempts to define in as concise a manner as appears possible, the frequency of injury by industrial classes, severity, causes, region and nature of these injuries. Some observations have required the use of various estimates. Where this has been found necessary, the conclusions drawn may be subject to the degree of accuracy in the estimates supplied by various external sources.

The compilation of injury statistics is normally complicated by the great volume of material available and questions of what to incorporate in a report of this nature and what to eliminate becomes a critical consideration. In such situations, the practical uses to which the data may be put are the governing factors.

Much of the material which follows in the body of the report is based on a computer oriented tabulation of each and every injury, in some areas however a sampling procedure was used to obtain the distribution. A case in point is the subsection on the causative agency in the various classification of causes. The procedure followed was to select a weighted sample between industrial classes from which a further random sample was selected.

Direct costs which constitute a necessary part of this report do not include such costs as are attributable to administration, rehabilitation, upgraded pensions or other amounts set aside to meet unreported claims.

Modifications in our program for 1965 have resulted in the tabulation of new information which should enhance the readers attempt to probe deeper into the effects of industrial injuries within and between the various classifications. We refer particularly to Tables VII - IX - X which illustrate the relative severity and costs as represented by their averages for the causes, regions and nature of these injuries. It should perhaps be mentioned at this point the validity of certain of these calculations. In cases where the frequency reported was of a very low order the averages may not be representative of the true state of affairs. (One very serious injury in a cause, region or nature of low frequency will distort the average by yielding a value which is too great.) Since the attribute of greatest concern is one in which the frequency is high, the distortion in averages should not be so great as to invalidate the use.

INDUSTRIAL INJURIES IN NEW BRUNSWICK

I FREQUENCY OF INJURY

During the year 1965, the number of injuries as reported to the Council rose to 20,602 from 19,596 an increase of 1,006 over the year 1964. This increase of 5.1 per cent compares to an increase in industrial payrolls of approximately 1.2 per cent (1) thus while the frequency was greater it should be kept in mind that the base is constantly changing.

The frequency of injury expressed as a ratio to payroll indicates that in 1964, industry incurred one injury for every $14,000 of payroll, while this year this ratio is approximately one per $13,950. This slight difference is well within the normal range of variation.

Reference to Table I affords a comparison of the frequency of industrial injuries related to the employed labour force for the years 1965 and 1964. The comparison of injuries as a percentage of the employed labour force yields the same conclusion as was drawn from the ratio of injuries to payroll.

TABLE I

Year	*No. of Injuries*	*Employed Labour Force* (2)	*Injury % of E. L. F.*	*Injury Rate per M. Dollars of Payroll*
1965.....	20,602	185,000	11.1	.072
1964.....	19,596	177,000	11.1	.071

Footnotes

(1) Adjusted figures from Workmen's Compensation Board Annual Report—total number of claims reported less cases listed as non-compensable.

(2) Estimates—Department of Labour, New Brunswick.

Table I above indicates a rate of injury of .072 per thousand dollars of payroll for 1965 which is consistent with a rate of .071 established in 1964. Thus while it is evident that the employed labour force is increasing the compensation coverage is also increasing. The conclusion reached is one of possible increase in frequency of industrial injuries with a constant percentage of the employed labour force being affected.

II DIRECT COSTS OF INDUSTRIAL INJURIES

The direct costs of injuries sustained in the year 1965 as reported to the Council amounted to $2,655,655 which represents an expenditure of thirteen dollars for every member of the employed labour force. This figure represents an increase of $161,360 over the comparable figure of $2,494,295 for the year 1964. Additionally in 1965 a further amount of $1,848,000 was expended in the settlement of injuries which occurred in 1964 and prior years. The comparable figure for last year was $1,910,000. Thus a reduction of $62,000 was effected, a large part of which reflects the slight reduction in the frequency of injury in 1964.

Table II lists the direct costs for all injuries reported in 1965 by industrial class. By way of comparison the corresponding costs for 1964 are included in brackets. Decreases in costs occurred in transportation, C.N.R., Forestry and Federal Government classes. Any decrease in costs was more than offset by increases in the remaining groups, with the construction class incurring increased costs in 1965 over 1964 of $243,393 followed by the manufacturing and sales class with an increase of $119,396. The direct costs associated with mining, while higher this year over last, represent a relatively small departure from the anticipated costs due to a considerably improved employment record in the Province.

During the year 1965, the total number of working days lost as a result of injuries in the Province reached a figure of 202,423 of which 53,234 were allocated to injuries incurred in other years. Table VIII allocates the days lost and cost by class. It is noted that in the 1965 injuries, construction contributed the greatest amount to total costs with a direct cost figure of $707,134 or about 26 per cent of total, followed by the forest products group with costs of $672,907 (25.3 per cent of total) and manufacturing and sale with costs of $657,211 or 24.75 per cent of total.

TABLE II

(3) Direct costs and actual number of working days lost by industrial classification for injuries incurred in 1965.

Class	*Direct Cost in Dollars 1965*	*1964*	*Per Cent Increase (Decrease)*	*Number of Lost Time Injuries 1965*	*Average Direct Cost per Injury in Dollars*(4)	*Average Direct Cost of Minor Injuries*(5)
Mining	$ 208,771	(175,387)	19.0	486	386	17
Forestry	672,907	(812,709)	(17.2)	2,181	273	21
Manufacture and Sale	657,211	(537,815)	22.2	2,367	210	16
Construction	707,134	(463,741)	52.5	1,759	303	16
Transportation	164,596	(176,879)	(6.9)	336	327	21
C.N.R.	81,527	(127,243)	(35.9)	148	334	21
Federal Government	48,297	(82,799)	(41.7)	184	268	19
Provincial Government	118,212	(117,722)	0.4	282	390	14
Total	$2,655,655	(2,494,295)	6.5	7,743	276	17

Footnotes

(3) Direct costs do not include such items as upgrading of pensions, administration or allocations to reserve or unreported claims.

(4) Average represents only average costs of total temporary disabilities for injuries reported during the year.

(5) Costs of minor injuries paid by Compensation Board.

III SEVERITY OF INDUSTRIAL INJURIES

Fatalities—1965 closed with 34 recorded fatalities, two less than in the previous year and the worst record for fatalities (with the exception of 1964) since the year 1947 when 37 fatalities were recorded.

The median age at death was 42 years. The fatalities resulted in a loss of approximately 750 working years and something greater than this in life years. These 34 fatalities left a total of 88 dependents—23 widows and 65 children. The highest number of fatalities, 10, occurred in the construction industry followed respectively by manufacture and sale with 8; forestry—7; and transportation—6. One fatality occurred in each of classes 7, 8, and 9.

TABLE III

Agency Involved in Fatal Injury—1965

Agency	*Mining*	*Forestry*	*Manufacture and Sale*	*Construction*	*Transportation*	*7, 8, 9*	*Total*
Motor Vehicle		2	4	2		2	10
Motorized Equipment			1	4	2	1	8
Materials		3	2				5
Falls				3			3
Electrical Contact				1			1
Miscellaneous		2	1		4		7
Total	—	7	8	10	6	3	34

CONCLUSION

Despite the extremely active pace of heavy industry in the Province during 1965 the incidence of very serious injury did not increase significantly. Thus while it is acknowledged that the frequency of injury was greater this year when compared to 1964 we find a somewhat greater preponderance of minor injuries included in our data, which may be a reflection of the efforts of management to exercise closer control over industrial situations which could give rise to more serious types of injury.

Charts and tables included in this year's report serve to define in a more specific manner the relative seriousness of injury between various causes, natures and regions. Comparison between classes and causes for these attributes will illustrate the extreme variability inherent in the injury statistics and the rather large distortion in the averages caused by a very few very serious cases. When these abnormal cases are eliminated the effects on the grand averages are reduced by a large amount.

In all classifications, three industries which provide the greatest potential for serious injury in the industrial complex appear to be forestry, mining and construction. This is fairly pronounced in all charts and tables. In many cases the reduction of a small number of injuries will result in radically reduced costs. Reference to the causative agents involved in these injuries (see chart on causative agents) suggest that as many as 20 to 56 per cent of all injuries in these classes are due to working materials and about 8 per cent to slippery surfaces. Presumably safe work habits in handling materials could reduce the number of injuries in these classes by a significant number.

SUMMARY OF CONCLUSIONS

1. There were 34 fatal injuries reported in 1965.
2. The absolute frequency rate of injury expressed as a percentage of employed labour force for 1965 represents no change over 1964. This rate of 11.1 per cent is based on all industry.
3. The average injury rate in the Province—.072 per thousand dollars of payroll.
4. A total of 202,423 working days were lost due to injuries in 1965.
5. The average number of working days lost due to work injuries was computed to be 8.5 with associated average costs of $190.00.
6. Increased frequency of injury in the construction, mining and manufacture and sale classifications (see table on comparison of number of injuries 1965—1964).
7. Major causes of industrial injuries follow pattern similar to that established in previous years.

TABLE IV

PERCENTAGE DISTRIBUTION BY AGENCY INVOLVED

Agency Involved	*Class No. 1*	*2*	*4*	*5*	*Average All Classes*
Materials	20.2	25.1	36.0	43.0	29.6
Objects in Work Area	*	1.2	3.1	4.0	1.8
Slippery Surfaces	7.9	5.0	7.9	7.6	7.1
Tools and Machinery	13.4	22.7	10.7	10.0	14.6
Flying Particles	7.5	5.4	14.4	10.0	9.2
Falling Objects other than Materials	13.2	3.4	*	*	3.9
Other	37.2	37.2	27.9	25.4	33.8
Total	100.0	100.0	100.0	100.0	100.0

* Smaller than 1 per cent.

Class 3—Manufacture and Sale not considered due to highly variable environments.

TABLE V

COMPARISON OF NUMBER OF INJURIES 1965—1964 BY CLASS

1964 Actual Number of Injuries. 1965 Expected and Actual.

Class	*NUMBER OF INJURIES* (1) *1964 (Actual)*	* (2) *1965 (Expected)*	(3) *1965 (Actual)*	*DIFFERENCE* (4) (2) — (1)	(5) (3) — (2)
Mining	881	928	1,026	47	98
Forestry	4,468	4,702	3,948	234	(—754)
Manufacture and Sale	6,957	7,321	7,652	364	331
Construction	4,566	4,805	5,289	239	484
Transportation	843	887	833	44	(—54)
7	571	598	582	27	(—16)
8	595	618	547	23	(—71)
9	715	743	725	28	(—18)
TOTAL	19,596	20,602	20,602	1,006	—

* Column 2 based on expected distribution of 20,602 injuries.

TABLE VI **CLAIMS PER COST COMPARISON**

Class	1965 Claims	1965 Days Lost	1965 Cost	PRIOR YEARS Claims	PRIOR YEARS Days Lost	PRIOR YEARS Cost	TOTAL ALL YEARS Claims	TOTAL ALL YEARS Days Lost	TOTAL ALL YEARS Cost
1	945	10,604	$ 205,771	304	3,290	$ 201,743	1,249	13,894	$ 407,514
2	3,671	45,395	672,907	1,143	18,083	646,457	4,814	63,478	1,319,364
3	7,090	39,923	657,211	1,551	11,590	313,663	8,641	51,513	970,874
4	4,901	33,398	707,134	1,217	12,739	453,405	6,118	46,136	1,160,538
5	784	8,074	164,596	187	3,444	89,964	971	11,518	254,560
7	511	3,237	81,527	191	1,568	57,049	702	4,805	138,576
8	483	2,990	48,297	174	1,268	39,919	657	4,258	88,216
9	656	5,568	118,212	211	1,252	45,276	867	6,820	163,488
TOTAL	19,041	149,189	$2,655,655	4,978	53,234	$1,847,476	24,019	202,423	$4,503,131

TABLE VII AVERAGE WORKING DAYS LOST AND COST PER INJURY—CAUSE BY CLASS—1965

Cause		Class 1	2	3	4	5	7	8	9	Average
Striking against, stepping on objects	Days Lost	6.0	6.4	3.7	3.3	3.9	2.3	4.3	3.4	4.0
	Cost	$ 65	$120	$ 48	$ 51	$ 49	$ 53	$ 66	$ 48	$ 58
Struck by objects	Days Lost	10.7	12.9	4.1	5.3	12.2	3.4	3.4	4.7	7.4
	Cost	$151	$183	$ 63	$107	$186	$ 72	$ 63	$ 58	$116
Caught in, on, or between	Days Lost	15.5	15.3	8.1	10.1	7.2	2.4	3.4	6.9	9.9
	Cost	$249	$208	$147	$326	$ 99	$ 47	$ 65	$107	$193
Collision or wrecks	Days Lost	33.4	16.3	9.9	19.8	2.3	16.9	10.3	27.6	16.2
	Cost	$455	$237	$1,372	$396	$5,324	$301	$125	$2,225	$1,167
Falls and Slips	Days Lost	13.4	14.5	9.3	11.2	12.4	13.2	10.5	12.9	11.4
	Cost	$156	$177	$113	$187	$194	$207	$169	$165	$159
Temperature Extremes and Explosion	Days Lost	11.0	5.8	4.0	4.4	4.5	7.4	2.2	7.7	4.6
	Cost	$277	$789	$ 88	$ 72	$ 44	$164	$ 38	$ 69	$230
Inhalation	Days Lost	13.0	4.1	5.3	6.8	—	14.8	18.2	1.5	6.4
	Cost	$198	$ 70	$ 58	$110	$ 8	$176	$231	$ 21	$ 90
Electrical Contact	Days Lost	6.2	12.3	4.0	16.3	—	—	15.0	2.0	9.7
	Cost	$168	$179	$197	$2,232	—	—	$198	$ 31	$920
Over Exertion	Days Lost	10.1	7.9	7.1	8.3	13.4	4.9	4.7	9.8	7.7
	Cost	$119	$105	$ 94	$115	$242	$ 77	$ 71	$104	$104
Miscellaneous	Days Lost	4.3	9.4	2.3	2.6	—	—	4.3	12.0	4.7
	Cost	$ 46	$115	$ 36	$ 44	—	—	$ 55	$190	$ 69
All Causes	Days Lost	11.2	13.2	6.0	7.6	12.0	6.9	6.5	7.9	8.5
	Cost	$327	$275	$113	$191	$293	$198	$135	$189	$190

TABLE VIII **NUMBER OF INJURY — CAUSE BY CLASS**

Cause	1 No.	1 %	2 No.	2 %	3 No.	3 %	4 No.	4 %	5 No.	5 %	7 No.	7 %	8 No.	8 %	9 No.	9 %	Total No.	Total %
Striking Against and Stepping on	128	12.5	343	8.7	1,617	21.1	842	15.9	82	9.8	68	11.7	74	13.5	81	11.2	3,235	15.7
Struck By	477	46.5	2,189	55.4	2,684	35.1	2,046	38.7	404	48.5	193	33.2	159	29.1	247	34.1	8,399	40.8
Caught in, on, or between	91	8.9	318	8.1	642	8.4	344	6.5	91	10.9	57	9.8	33	6.0	57	7.9	1,633	7.9
Collisions and Wrecks	7	0.7	26	0.7	70	0.9	45	0.9	8	1.0	7	1.2	4	0.7	25	3.4	192	0.9
Falls and Slips	221	21.5	814	20.6	1,580	20.7	1,370	25.9	201	24.1	172	29.6	181	33.1	215	29.7	4,754	23.1
Temperature Extremes, Explosions	24	2.3	52	1.3	333	4.4	217	4.1	8	1.0	20	3.4	16	2.9	15	2.1	685	3.3
Inhalation and Industrial Disease	17	1.7	35	0.9	130	1.7	112	2.1	4	0.5	5	0.9	9	1.7	10	1.4	322	1.6
Contact with Electric Current	3	0.2	8	0.2	15	0.2	19	0.4	—		1	0.2	2	0.4	1	0.1	49	0.2
Over Exertion	52	5.1	150	3.8	519	6.8	263	5.0	34	4.1	59	10.0	51	9.3	52	7.1	1,180	5.8
Miscellaneous	6	0.5	13	0.3	62	0.7	31	0.5	1	0.1	—		18	3.3	22	3.0	153	0.7
Total	1,026		3,948		7,652		5,289		833		582		547		725		20,602	

TABLE IX **AVERAGE DAYS LOST AND COST PER INJURY BY NATURE, BY CLASS—1965**

Nature		Class 1	2	3	4	5	7	8	9	Average
Amputations	Days Lost	42.5	57.0	51.3	41.5	6.5	20.7	—	60.7	48.7
	Cost	$2,213	$1,648	$2,270	$1,538	$536	$718	—	$16,363	$2,422
Scalds	Days Lost	4.0	9.0	3.7	6.8	5.1	7.2	2.2	5.0	5.2
	Cost	$ 79	$140	$ 52	$309	$ 48	$126	$ 32	$ 49	$134
Cuts	Days Lost	9.5	9.7	4.3	4.5	7.3	2.8	4.1	5.4	5.9
	Cost	$217	$120	$ 54	$ 73	$121	$ 50	$ 76	$ 69	$ 85
Sprains	Days Lost	10.9	11.4	7.2	8.7	9.7	9.8	7.9	9.0	8.7
	Cost	$129	$138	$ 92	$116	$148	$148	$118	$119	$ 85
Fractures	Days Lost	32.0	34.2	21.7	29.3	35.4	14.3	22.5	26.7	28.3
	Cost	$405	$576	$412	$566	$475	$264	$333	$322	$486
Eyes	Days Lost	1.9	3.2	1.1	1.2	0.2	—	1.8	0.8	1.4
	Cost	$122	$ 62	$ 30	$ 24	$ 10	$ 7	$ 24	$ 15	$ 35
Hernia	Days Lost	33.3	40.1	32.6	40.4	40.6	55.9	22.2	32.7	37.1
	Cost	$469	$541	$542	$666	$671	$904	$391	$495	$588
Occupational Disease	Days Lost	57.8	7.8	13.6	1.1	—	24.7	39.5	3.0	13.2
	Cost	$1,017	$ 73	$110	$ 14	—	$281	$496	$ 35	$142
N.E.C.	Days Lost	1.7	4.2	2.2	1.5	0.3	14.4	0.8	0.4	2.4
	Cost	$ 47	$100	$181	$310	$ 26	$272	$ 27	$ 21	$176
All Natures	Days Lost	11.2	13.2	6.0	7.6	12.0	6.9	6.5	7.9	8.5
	Cost	$327	$275	$113	$191	$293	$198	$135	$189	$190

TABLE X AVERAGE DAYS LOST AND COST PER INJURY BY REGION, BY CLASS—1965

Region		*Class* 1	2	3	4	5	7	8	9	*Average*
Eye	Days Lost	1.9	3.2	1.1	1.2	0.2	—	1.8	0.8	1.4
	Cost	$122	$ 62	$ 30	$ 24	$ 10	$ 7	$ 24	$ 15	$ 35
Other Upper Extremities	Days Lost	10.8	16.3	7.1	8.0	17.1	3.9	3.7	10.6	9.7
	Cost	$126	$219	$ 83	$122	$349	$ 60	$ 60	$110	$133
Ear	Days Lost	—	1.4	1.7	0.3	—	7.3	—	1.0	1.3
	Cost	$ 12	$ 21	$ 28	$ 6	$ 5	$167	$ 5	$ 13	$ 18
Feet	Days Lost	9.8	14.4	7.5	8.4	17.5	9.8	6.9	8.3	9.9
	Cost	$103	$155	$ 78	$102	$183	$168	$ 80	$ 93	$111
Head and Neck	Days Lost	8.7	10.3	3.6	4.9	4.2	2.9	4.5	4.1	5.7
	Cost	$112	$495	$265	$197	$ 66	$ 99	$ 67	$ 42	$259
Toes	Days Lost	10.6	19.6	5.9	9.7	14.9	7.4	6.1	9.6	11.0
	Cost	$343	$227	$ 63	$115	$142	$ 99	$ 84	$102	$135
Back	Days Lost	16.9	14.1	9.2	11.0	10.2	13.2	5.7	16.4	11.4
	Cost	$189	$183	$127	$158	$158	$227	$ 70	$256	$157
Other Lower Extremities	Days Lost	16.5	15.5	8.8	10.5	14.6	6.8	11.1	13.2	11.8
	Cost	$192	$191	$112	$151	$175	$112	$219	$565	$176
Chest	Days Lost	8.0	11.1	4.7	6.5	7.3	5.3	6.1	5.6	7.3
	Cost	$ 83	$110	$ 50	$180	$ 74	$ 71	$ 85	$ 55	$105
Internal Injuries	Days Lost	37.0	21.3	11.4	22.7	16.3	34.3	53.8	14.2	21.0
	Cost	$3,117	$375	$481	$1,747	$4,551	$518	$918	$323	$1,207
Trunk	Days Lost	14.5	17.7	15,6	21.0	24.3	27.8	12.2	13.8	17.8
	Cost	$185	$246	$411	$332	$414	$445	$207	$185	$329
Miscellaneous	Days Lost	—	—	—	—	—	0.5	—	0.3	0.5
	Cost	$ 30	$ 22	$ 19	$ 26	$ 25	$ 43	$ 19	$ 21	$ 23
Hands	Days Lost	11.7	10.8	5.1	6.5	9.3	4.8	5.1	5.9	6.8
	Cost	$129	$142	$ 62	$ 84	$112	$ 75	$ 81	$ 67	$ 85
Fingers	Days Lost	11.2	11.6	5.1	6.4	9.0	1.7	4.0	6.1	6.7
	Cost	$134	$162	$ 75	$104	$111	$ 51	$ 61	$ 94	$ 98
All Regions	Days Lost	11.1	13.2	6.0	7.6	12.0	6.9	6.5	7.9	8.5
	Cost	$327	$275	$113	$191	$293	$198	$135	$189	$190

FIGURE 1

Distribution of Industrial Injuries 1963, 1964 and 1965, by Class Expressed as a Percentage of All Injuries

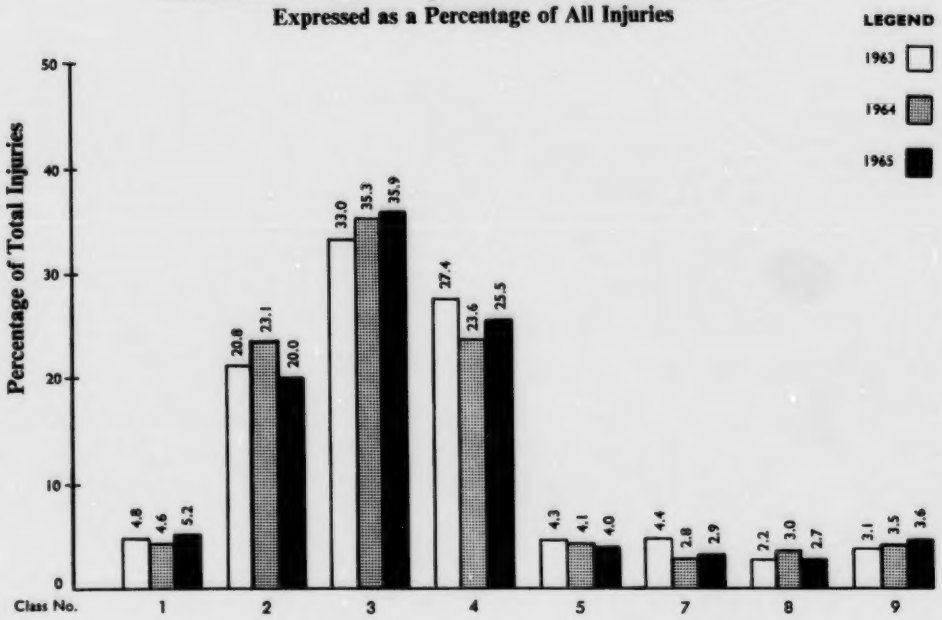


FIGURE 2

Causes of Injury Expressed as Percentage of Total

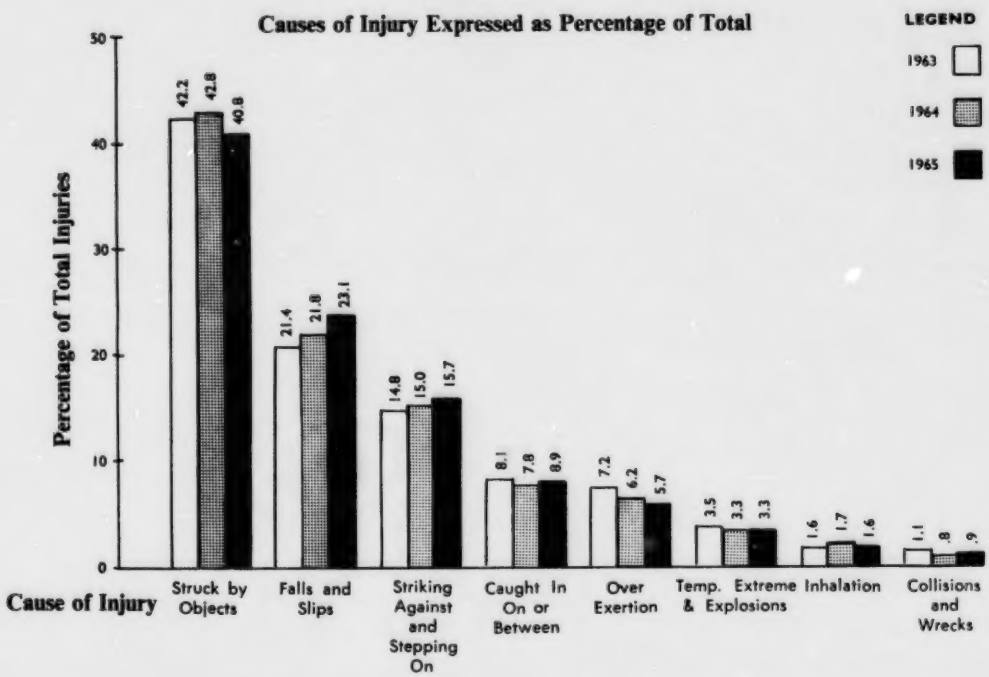


FIGURE 3

Nature of Injury Expressed as a Percentage of All Injuries

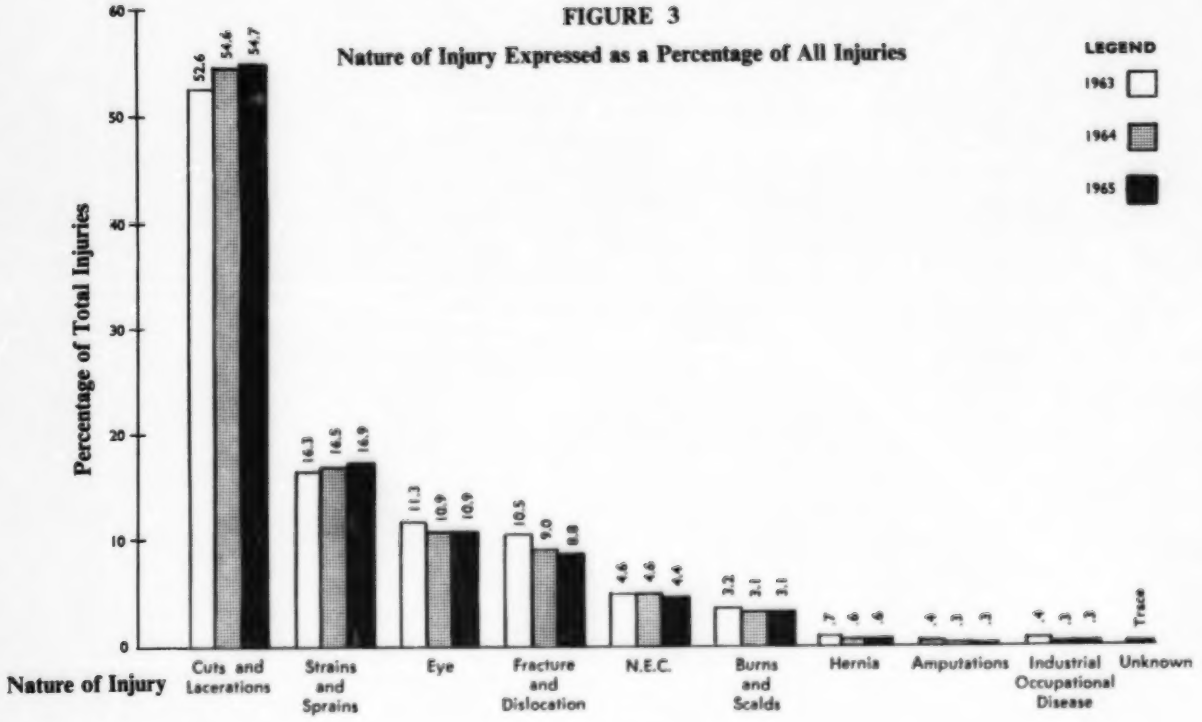


FIGURE 4

Region of Injury Expressed as a Percentage of All Injuries

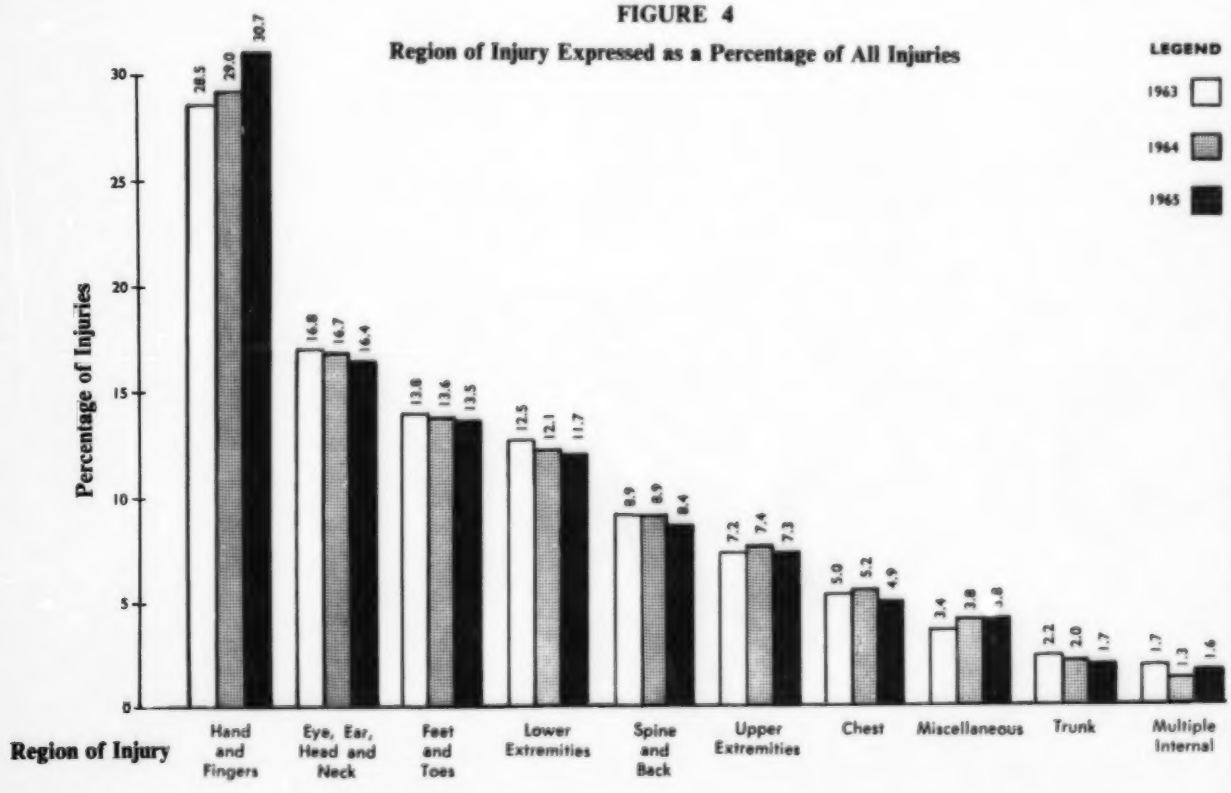


FIGURE 5 **Average Number of Working Days Lost and Direct Cost by Cause of Injury**

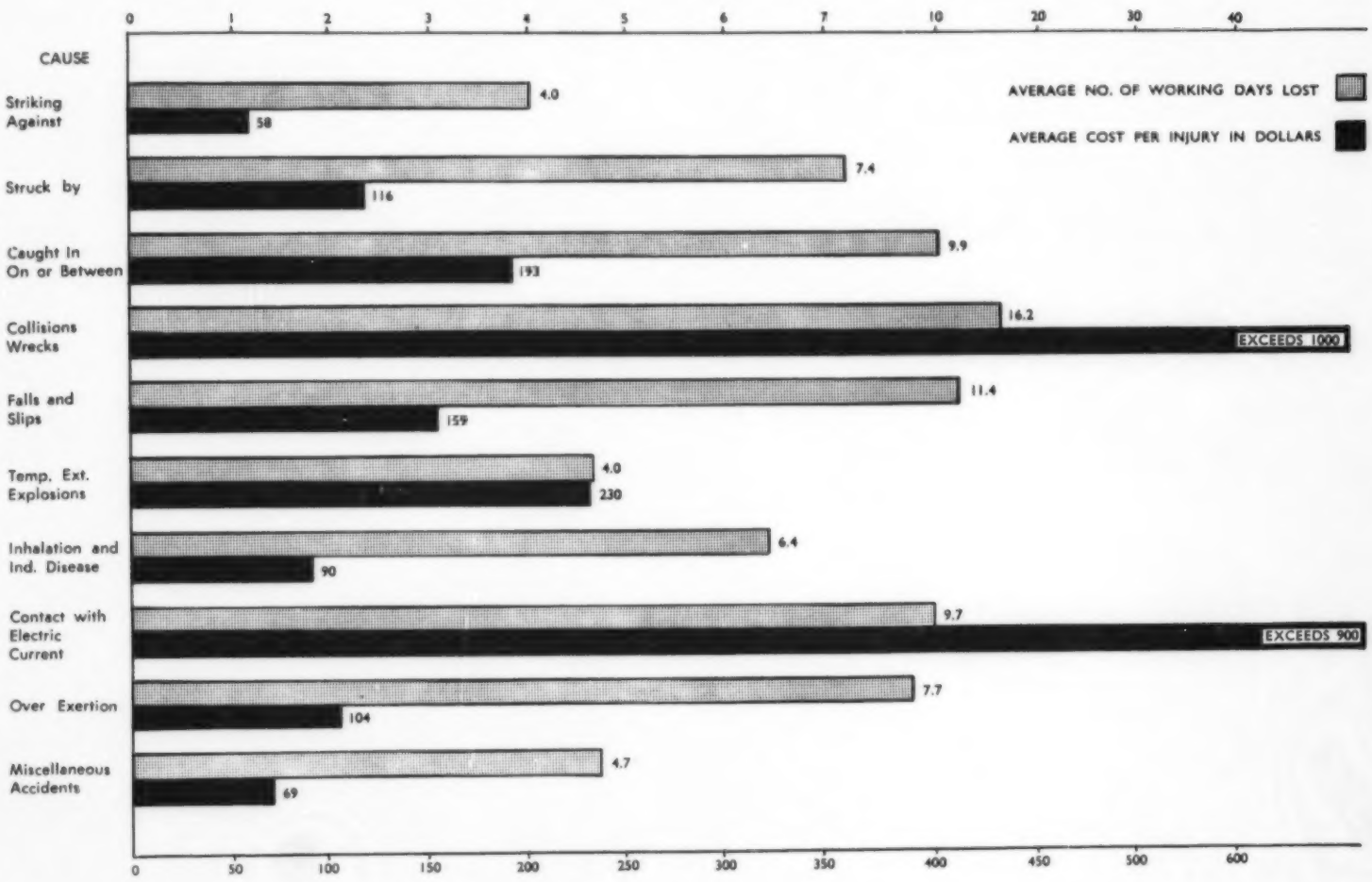


FIGURE 6 **Average Number of Working Days Lost and Direct Cost by Nature of Injury**